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Zinov'ev, G. M., B. V. Struminskiĭ, R. N. Faustov, and V. L. Chernyak. Proton Structure and the Hyperfine Splitting in the Hydrogen Atom—715 [1284]
Zolotavin, A. V. (see Avotina, M. P.)—629 [1133]
Zuk, M. (see Grishin, V. G.)—691 [1242]
Zul'karneev, R. Ya., V. S. Nadezhdin, and V. I. Satarov. New Measurements of the Angular Dependence of the Depolarization Parameter in pp Scattering at 635 MeV—98 [178]